### WEEKLY PROGRESS UPDATE FOR MARCH 31 – APRIL 4, 2003

#### EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019, 1-2000-0014, & BOURNE-BWSC 4-15031

# MASSACHUSETTS MILITARY RESERVATION TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from March 31 through April 4, 2003.

#### 1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of April 4 is summarized in Table 1.

Table 1. Drilling progress as of April 4, 2003									
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)					
MW-100	Central Impact Area (CIAP-30)	270	132						
MW-265	J-1 Range (J1P-16)	315	186						
MW-266	Central Impact Area (CIAP-27)	250	101						
bgs = below bwt = below	ground surface water table								

Commenced well installation of MW-265 (J1P-16) and continued drilling of MW-100 (CIAP-30) and MW-266 (CIAP-27). Well development continued for newly installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-100 and MW-266. Groundwater samples were collected from Bourne water supply and monitoring wells, recently installed wells, and as part of the April Long-Term Groundwater Monitoring Plan. Influent water samples were collected as part of the pilot study being conducted at MW-80. Soil samples were collected from Demo Area 2, Gun Position 11, and from the soil cuttings of well 02-10.

The following are notes from the April 3, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

#### **Participants**

Hap Gonser (IAGWSPO) Ben Gregson (IAGWSPO) Bill Gallagher (IAGWSPO) Tina Dolan (IAGWSPO) Todd Borci (EPA - phone) Meghan Cassidy (EPA - phone) Desiree Moyer (EPA) Jane Dolan (EPA) Bob Lim (EPA) Dave Williams (MDPH) Len Pinaud (DEP) Mark Panni (DEP) Nick laiennaro (ACE) Gina Kaso (ACE) Heather Sullivan (ACE) Ed Wise (ACE) Marc Grant (AMEC - phone) Joanne Muzzin (AMEC) Dick Skryness (ECC - phone) Larry Pannell (Jacobs)

#### **Punchlist Items**

- #3 Renew access agreements for PZ208 and PZ211 Access for PZ211 was verbally granted by property owner; written access agreement will not be provided by the property owner. Site walk scheduled for today to assess extent of debris.
- #9 <u>Evaluation of SE Range wells</u> Wells have been sampled for perchlorate. Sampling needs will be addressed in the LTM review process.
- #10 Right of Entry (RoE) for NWP-1 RoE paperwork at Corps District Office and processing is in progress. No problems are anticipated in receiving approval.
- #11 <u>Water Supply Source for Bourne Bridge Park rest room facility</u> EPA asked about source of water in rest room facility. Bill Gallagher confirmed with Ralph Marks that facility is supplies with water from Town of Bourne.
- #12 Private Property Irrigation Well Irrigation well was installed near the baseball field. Bill Gallagher checking to see if irrigation well is downgradient from 95-6 well. Will follow up with particle tracks and determine construction details of well to consider sampling, if well is determined to be at the appropriate location and depth.
- #13 Soil Sampling dates and analysis due dates from burn pits at GP-15, 16, 22 Rob Foti provided dates for burn pit sampling.
  - GP-16 sampled 3/12, analytical results expected back week of 4/22.
  - GP-22 no sampling.
  - GP-15 sampled 3/25 and 3/26, analysis expedited on 3/28, analytical results expected back week of 4/4.
  - Former F trails sampled 3/10, analytical results expected week of 4/22.
- #14 <u>Information about 7.62 mm rounds link belt found at Former Demo sites</u> Empty links, no bullets.

#### **MSP/SE Ranges Update**

- Gina Kaso (ACE) provided an update on the MSP3 task and SE Ranges fieldwork.
- Ox Pond Walk-through of area with Karen Wilson, Dr. Susan Goodfellow, and MADEP/EPA on 3/28/03. Minor additional sifting required; bags of debris remaining on screen to be provided to Dr. Goodfellow; holes backfilled. Final pictures taken. Table of findings to be provided.
- <u>Gun&Mortar</u> Completed all excavation of all anomalies in accordance with the new work plan. Draft table of findings provided.
- <u>Former Demo</u> Completed anomaly excavations with no significant findings. Walk-through of area with K. Wilson, Dr. Goodfellow, and MADEP/EPA on 3/28/03. Draft table of findings provided.
- <u>ASP</u> Work complete. TetraTech is compiling data. Need to sample under the 105 mm cartridge casings once the area dries out.
- NBC EM-61 and Schonstedt survey figures (3) were provided to MADEP/EPA on 3/20/03.
- <u>J-3 Barrage Rocket and Hillside Sites</u> Operations continue. Crews have been concentrating on Barrage site clearing and cutting in transects. 17 transects surveyed in; 4 remaining should be completed by the end of week. Will continue with grubbing and surface clearance. Currently 30% complete with Schonstedt survey over Hillside area.
- Todd Borci asked about why only 30% complete at Hillside, as this site should be a higher priority than Barrage site.
- <u>General Fieldwork</u> Rig #4: Setting wells at J1P-16 (MW-265). Should be complete today. Will need to complete downhole clearance then advance a borehole for the 3<sup>rd</sup> well screen. The shallow screen setting at 210 ft bgs is too deep for Schedule 40 PVC; therefore Schedule 80 needs to be used. With Schedule 80, no more than 2 risers can fit in the 8" borehole.
- Rig #2: Continuing drilling at CIAP-27 from 170 ft bgs. Will move to BP-5 next.
- Rig #3: Continuing drilling at CIAP-30 from 190 ft bgs. Will move to CIAP-29 next.
- Rig #4: Once finished with MW-265 (J1P-16), will move to BP-2 next.

Well Development: Continuing with development at D2P-1 (MW-261).

UXO: Finished UXO clearance of FPR treatment plant location at GP-15. Sampled at the location of small propellant bag remnant location, area covered with polyethylene sheeting. Will perform downhole clearance for 3<sup>rd</sup> well at J1P-16 and in 5 locations for FPR treatment plant foundation soil borings. Will be demobing the UXO crew, except for 2 personnel, today. Demo 2 trench excavation complete. No significant findings. Sampling complete.

Restoration: Restoring J2P-14 (MW-230) and J2P-12 (MW-234) well pads.

Sampling: Sampling continuing for April LTM; gearing up with 4 crews starting next week. Recon of PZ211 today to see how much construction debris is on top of piezometer. Owners are planning on removing debris pile by end of month. Sampling at Demo 2 was completed.

ECC: Commenced recon of IDW stockpiles and unknowns on 4/2/03.

# **Northwest Corner of Camp Edwards**

Bill Gallagher (IAGWSPO) gave an update on the Northwest Corner Investigation.

- Letter regarding access of Corps property for installation of NWP-1 was sent from the Army to the Corps last week. The letter was drafted by the Real Estate group and sent to regulatory and environmental regulation branch. Corps should agree by next week.
- ROAs submitted to Corps on Tues 4/1. ROAs forwarded from Corps to K. Wilson yesterday, 4/2
- Denis LeBlanc (USGS) flagged four USGS wells at base of Bourne Bridge. Three (3) were viable for sampling. One (1) well cap was missing; well will be sounded to determine depth to bottom.
- Ralph Marks at the Bourne Water District confirmed that business and residences along Winslow and Freeman Streets are on town water, as is the recreation facility at base of Bourne Bridge (responding to J. Dolan's request).
- Tina Dolen sending out letter today to neighborhood in the vicinity of 4036009DC to enquire about any private wells and to ask for permission to sample wells.
- Validated non-detect for perchlorate at 4036011 well; analytical results were faxed out to property owner representative yesterday, 4/2.
- 95-15, 95-6 Pump Test reports reviewed by AMEC, noted additional wells from pump test report that were not previously identified on IAGWSP maps. Kim Harriz (AMEC) to complete map showing new wells based on findings from Pump Test report review.
- J. Dolan asked about the number of wells sampled. Bill Gallagher to check, will be added to Punchlist for next week.
- T. Borci asked about proposed well NWP-1 near well 4036009DC. Has the original stake been moved? Originally staked near an existing well but should be moved to unpaved area to match the mapping. Bill Gallagher to check on well location.
- J. Dolan asked about sampling schedule for the USGS wells at the Bourne Bridge. Bill Gallagher to check on sampling schedule for wells and will provide next week.
- DEP sent comment on the Northwest Corner Approach Letter earlier this week. EPA to send comments within a few days.

#### Bourne

Bill Gallagher (IAGWSPO) gave an update on the Bourne area investigation.

- Analytical result at 02-10M1 of 0.72 ug/l for perchlorate was confirmed, reanalysis confirmed a distinct peak though there was some interference. Well will be re-sampled next week.
- Confirmatory analysis and/or re-sampling is done on a case-by-case basis

#### **Drilling Status**

Heather Sullivan (ACE) provided a drilling status update.

- BP-2 Starting Fri 4/4.
- BP-5 Starting week of 4/14.
- BWD Installing well upgradient of BP-4 using AFCEE financing, waiting on NStar easement, should receive easement shortly. BWD want to use Maher rig, not incorporated in current drilling schedule.
- MDL Study results MADEP would provide written report by end of next week. BWD
  questioned whether IAGWSPO has plans to change perchlorate analytical method; no plans
  to change method.
- Letter for proposed sampling changes waiting on EPA comments, Terry Martin (MADEP) sent concurrence letter.
- Bourne Perchlorate Response Plan Received comments from agencies. MOR discussion to be held next week after technical meeting.

### **MW-80 Pilot Study Update**

Heather Sullivan (ACE) provided an update on the MW-80 Pilot Study.

- Written approval to proceed with Pilot Study received from MADEP 3/28.
- Pilot Study started on 3/31, 24 hr/day operation pumping at 5-5.5 gpm.
- No analytical data back yet, 2 day TAT on data, discharging Mon 4/7 late in day.
- MADEP forwarded the discharge plan to Division of Water Supply yesterday, 4/2. DWS will have to approve discharge.
- Approval for water discharge needed by Fri 4/4, end of the day.
- Analytical data will be provided to DEP by email Thurs 4/3. Contingency plan if there are detects in effluent is to run water back through system. No detects are expected.
- Rapid Small Scale Column Test on groundwater from MW-80 and MW-211 commenced last week. Preliminary study results are expected at the end of April.
- Len Pinaud requested a site visit of pilot test, today Thurs 4/3 or with existing tour to DWS personnel being given Tues 4/8.

#### **Document Schedule Update**

Marc Grant (AMEC) reviewed scheduling issues as listed on a one-page handout, noting the following priorities:

- Draft HUTA1, HUTA2 comments being reviewed by Len Pinaud. Expecting to forward comments shortly.
- EPA SCAR Report review top priority
- Gun & Mortar COC Letter Report next most important, MADEP working on review
- Bourne Perchlorate Response Plan agency comments received on 4/3.
- Demo 1 RRA/RAM Plan document schedule delayed due to lack of resolution at first comment resolution meeting. Second CRM set up for 4/10. EPA waiting for revised implementation schedule. M. Cassidy requested schedule by early next week for review before CRM on 4/10.
- Central Impact Area Soil Eco Risk Workplan 1 week delay, CRM to be held after technical meeting on 4/10. Email to be sent to Dan Huber for Central Impact Area meeting.
- Training Areas Report has milestone coming up, an extension request will be submitted to extend this due date.
- L. Pinaud commented that the Guard should not expect comments from MADEP on BIP reports. Ben Gregson stated that quarterly BIP reports would be phased out to be replaced by RAM Status Reports. B. Gregson to check on schedule for this transition.

- J. Dolan asked Gina Kaso about revised MSP Phase I Report. Revised RCL was sent to agencies 2/19.
- MSP3/ASP Workplan was disapproved by EPA. MADEP to provide comments soon.

#### Miscellaneous Items

- J. Dolan asked for an update on wells, previously dry, that were being resampled for
  perchlorate analysis. H. Sullivan provided the agencies with a table with the sampling status
  of all wells proposed for perchlorate sampling in the Site-wide Perchlorate Report. The LTM
  revision would evaluate perchlorate sampling; wells not previously sampled for perchlorate
  would be evaluated with new wells to the LTM program.
- T. Borci asked about the Site-wide Perchlorate Characterization Report. Guard waiting for comments from EPA; expected by mid-April.
- J. Dolan requested additional information about Chris Abate's (AMEC) statement at the March IART meeting that a transient model was being used to model the top of the groundwater mound at MMR. Ms. Dolan was directed to TM 03-01 for additional information.
- J. Dolan stated that two ASR witnesses that are represented by private counsel will be interviewed shortly and requested that the IAGWSP consider personnel to attend the interviews.
- J. Dolan pointed out that Hap Gonser agreed to provide a list with proposed RRA/RAM sites three weeks ago for 4/10 technical meeting.
- A handout regarding forward particle tracks and downgradient well screens from the Central Impact Area Groundwater OU was distributed by Heather Sullivan. Desiree Moyer will notify Corps if additional information is requested.
- T. Borci checking on MW-258 chromatogram request from 3/27 Tech team meeting. Evaluation will be provided on Fri 4/4.
- D. Moyer/B. Lim requested a Demo 2 site visit next Thurs 4/10
- MADEP requested a discussion of UT Fate &Transport CRM before the next IART meeting and that Jim Stahl be included in the dry run to provide comment. Tina Dolen to coordinate with Kevin Hood (Univ. of CT) regarding J. Stahl's schedule prior to April IART.
- UXO Discussion Hap Gonser asked MADEP to notify IAGWSPO next week if additional information is needed.
- Bill Gallagher sent out Range Control logs. T. Borci asked whether work would be addressed in Phase IIB work or with Training Ranges. Recon of areas would be conducted.
- D. Moyer requested information on profile analytical results for the new AFCEE well (58MW0021). The profile samples were ND for perchlorate
- Hap Gonser addressed a question from the March IART meeting regarding the plan for the SE Ranges. A conceptual plan will be discussed 4/16.

#### 2. SUMMARY OF DATA RECEIVED

Rush data are summarized in Table 3. These data are for analyses that are performed on a fast turn around time, typically 1-5 days. Explosive analyses for monitoring wells, and explosive and volatile organic compound (VOC) analyses for groundwater profile samples, are conducted in this timeframe, as well as any analyses pursuant to a special request. The rush data are not validated, but are provided as an indication of the most recent preliminary results. Table 3 summarizes only detects, and does not show samples with non-detects.

The status of the explosive detections with respect to confirmation using Photo Diode Array (PDA) spectra is indicated in Table 3. PDA is a procedure that has been implemented for the explosive analysis, to reduce the likelihood of false positive identifications. Where the PDA status is "YES" in Table 3, the detected compound is verified as properly identified. Where the status is "NO", the identification of an explosive has been determined to be a false positive. Where the status is blank, PDA has not yet been used to evaluate the detection, or PDA is not applicable because the analyte is a VOC or perchlorate. Most explosive detections verified by PDA are confirmed to be present upon completion of validation. Table 3 includes the following detections:

Table 3 includes detections from the following areas:

#### Bourne Area

- Groundwater samples from 02-13M2 had a detection of perchlorate. The results were similar to the previous sampling rounds.
- Influent samples from a pilot study at MW-80M1 had detections of perchlorate that were similar to the previous sampling rounds at this well.

#### **DELIVERABLES SUBMITTED**

Draft Final Technical Team Memorandum 02-6 Phase II(b) Report Weekly Progress Update for March 24 – March 28, 2003

03/31/2003 04/03/2003

#### 3. SCHEDULED ACTIONS

Scheduled actions for the week of April 7 include complete well installation of MW-265 (J1P-16), continue drilling at MW-266 (CIAP-27) and MW-100 (CIAP-30), and commence drilling at BP-2. Groundwater sampling at Bourne water supply and monitoring wells, at newly installed wells, and as part of the April Long-Term Groundwater Monitoring Plan will continue. Soil sampling at GP-15 will commence.

#### 4. SUMMARY OF ACTIVITIES FOR DEMO 1

Pumping and treating groundwater near the toe of the Demo Area 1 plume and at Frank Perkins Road has been selected as an Interim Action to address the Demo Area 1 Groundwater Operable Unit. The resolution meeting for the Demo 1 Groundwater RRA/RAM Plan will be continued on April 10, 2003. EPA and MADEP comments on the Soil RRA/RAM Plan were received on April 1, 2003 and responses are being developed.

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
90MW0022-E	FIELDQC	04/02/2003	FIELDQC	0	0		
G100DAE	FIELDQC	04/01/2003	FIELDQC	0	0		
G100DCE	FIELDQC	04/02/2003	FIELDQC	0	0		
G100DKE	FIELDQC	04/04/2003	FIELDQC	0	0		
G266DBE	FIELDQC	04/03/2003	FIELDQC	0	0		
HC61GPRKA-E	FIELDQC	04/02/2003	FIELDQC	0	0		
HCDEMO2T1PE	FIELDQC	04/01/2003	FIELDQC	0	0		
PT80M1INF1E	FIELDQC	03/31/2003	FIELDQC	0	0		
PT80M1INF1F	FIELDQC	03/31/2003	FIELDQC	0	0		
W02-07M1T	FIELDQC	04/03/2003	FIELDQC	0	0		
W02-07M3T	FIELDQC	04/04/2003	FIELDQC	0	0		
4036000-01G-A	4036000-01G	04/01/2003	GROUNDWATER	38	69.8	6	12
4036000-06G-A	4036000-06G	04/01/2003	GROUNDWATER	108	128	6	12
90MW0022-A	90MW0022	04/02/2003	GROUNDWATER	112	117	72.79	77.79
97-2C-A	97-2	04/03/2003	GROUNDWATER	132	132	68	68
97-2F-A	97-2	04/04/2003	GROUNDWATER	120	120	76.7	76.7
W02-07M1A	02-07	04/03/2003	GROUNDWATER	135	145	101.14	111.14
W02-07M1D	02-07	04/03/2003	GROUNDWATER	135	145	101.14	111.14
W02-07M2A	02-07	04/03/2003	GROUNDWATER	107	117	72.86	82.86
W02-07M3A	02-07	04/03/2003	GROUNDWATER	47	57	13	23
W02-09M1A	02-09	04/04/2003	GROUNDWATER	74	84	65.26	75.26
W02-09M2A	02-09	04/04/2003	GROUNDWATER	59	69	50.3	60.3
W02-09SSA	02-09	04/04/2003	GROUNDWATER	7	17	0	10
W02-13M1A	02-13	04/01/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	04/01/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M2D	02-13	04/01/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	04/01/2003	GROUNDWATER	68	78	28.3	38.3
W126M1A	MW-126	04/02/2003	GROUNDWATER	118	128	19	29
W176M1A	MW-176	04/01/2003	GROUNDWATER	270	280	158.55	168.55
W176M2A	MW-176	04/02/2003	GROUNDWATER	229	239	117.6	127.6
W255M1A	MW-255	03/31/2003	GROUNDWATER	206	216	96.3	106.3
W255M2A	MW-255	03/31/2003	GROUNDWATER	170	180	60.43	70.43
W255M3A	MW-255	03/31/2003	GROUNDWATER	136	146	26.1	36.1
W32DDA	MW-32	03/31/2003	GROUNDWATER	181.5	186.5	85	90

**Profiling methods include: Volatiles and Explosives** 

Groundwater methods include: Volatiles, Semivolatiles, Explosives,

Pesticides, Herbicides, Metals, and Wet Chemistry

Other Sample Types methods are variable

SBD = Sample Begin Depth, measured in feet bgs

SED = Sample End Depth, measured in feet bgs

BWTS = Depth below water table, start depth, measured in feet

BWTE = Depth below water table, end depth, measured in feet

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W32MMA	MW-32	03/31/2003	GROUNDWATER	161.5	171.5	65	75
W32SSA	MW-32	03/31/2003	GROUNDWATER	146.5	151.5	50	55
W33DDA	MW-33	03/31/2003	GROUNDWATER	181.5	186.5	85	90
W33MMA	MW-33	03/31/2003	GROUNDWATER	161.5	171.5	65	75
W33SSA	MW-33	03/31/2003	GROUNDWATER	146.5	151.5	50	55
W47DDA	MW-47	04/01/2003	GROUNDWATER	194	204	100	110
W47M1A	MW-47	04/01/2003	GROUNDWATER	169	179	75	85
W47M2A	MW-47	04/01/2003	GROUNDWATER	131.5	141.5	38	48
W66M2A	MW-66	04/03/2003	GROUNDWATER	140.8	150.8	22	32
W66SSA	MW-66	04/03/2003	GROUNDWATER	125.7	135.7	7	17
W85M1A	MW-85	04/01/2003	GROUNDWATER	137.5	147.5	22	32
W85SSA	MW-85	04/01/2003	GROUNDWATER	116	126	1	11
W88M1A	MW-88	04/02/2003	GROUNDWATER	233	243	92	102
W88M2A	MW-88	04/02/2003	GROUNDWATER	213	223	72	82
W88M3A	MW-88	04/02/2003	GROUNDWATER	173	183	32	42
W88M3D	MW-88	04/02/2003	GROUNDWATER	173	183	32	42
W93M1A	MW-93	03/31/2003	GROUNDWATER	185	195	56	66
W94M1A	MW-94	04/02/2003	GROUNDWATER	160	170	36	46
W94M2A	MW-94	04/02/2003	GROUNDWATER	140	150	16	26
W94SSA	MW-94	04/02/2003	GROUNDWATER	124	134	0	10
W96M2A	MW-96	03/31/2003	GROUNDWATER	160	170	24	34
W96M2D	MW-96	03/31/2003	GROUNDWATER	160	170	24	34
SC02-10A	SOIL CUTTING	04/02/2003	IDW				
PT80M1INF10A	MW-80	04/04/2003	PILOT STUDY				
PT80M1INF1A	MW-80	03/31/2003	PILOT STUDY	130	140	86	96
PT80M1INF2A	MW-80	03/31/2003	PILOT STUDY	130	140	86	96
PT80M1INF3A	MW-80	04/01/2003	PILOT STUDY	130	140	86	96
PT80M1INF4A	MW-80	04/02/2003	PILOT STUDY				
PT80M1INF5A	MW-80	04/02/2003	PILOT STUDY				
PT80M1INF5D	MW-80	04/02/2003	PILOT STUDY				
PT80M1INF6A	MW-80	04/02/2003	PILOT STUDY				
PT80M1INF7A	MW-80	04/03/2003	PILOT STUDY				
PT80M1INF8A	MW-80	04/03/2003	PILOT STUDY				
PT80M1INF9A	MW-80	04/04/2003	PILOT STUDY				

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OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
PTEFFA1A	PTEFFA1	04/01/2003	PILOT STUDY				
PTEFFA2A	PTEFFA2	04/02/2003	PILOT STUDY				
PTEFFA3A	PTEFFA3	04/04/2003	PILOT STUDY				
PTEFFB1A	PTEFFB1	04/02/2003	PILOT STUDY				
PTEFFB1D	PTEFFB1	04/02/2003	PILOT STUDY				
PTFTA1A	PTFTA1A	04/02/2003	PILOT STUDY				
G100DAA	MW-100	04/01/2003	PROFILE	140	140	1.8	1.8
G100DBA	MW-100	04/01/2003	PROFILE	150	150	11.8	11.8
G100DCA	MW-100	04/02/2003	PROFILE	160	160	21.8	21.8
G100DEA	MW-100	04/02/2003	PROFILE	180	180	41.8	41.8
G100DFA	MW-100	04/02/2003	PROFILE	190	190	51.8	51.8
G100DGA	MW-100	04/03/2003	PROFILE	200	200	61.8	61.8
G100DHA	MW-100	04/03/2003	PROFILE	210	210	71.8	71.8
G100DIA	MW-100	04/03/2003	PROFILE	220	220	81.8	81.8
G100DJA	MW-100	04/03/2003	PROFILE	230	230	91.8	91.8
G100DKA	MW-100	04/04/2003	PROFILE	240	240	101.8	101.8
G100DLA	MW-100	04/04/2003	PROFILE	250	250	111.8	111.8
G100DMA	MW-100	04/04/2003	PROFILE	260	260	121.8	121.8
G266DAA	MW-266	04/02/2003	PROFILE	165	165	16.25	16.25
G266DBA	MW-266	04/03/2003	PROFILE	170	170	21.25	21.25
G266DCA	MW-266	04/03/2003	PROFILE	180	180	31.25	31.25
G266DDA	MW-266	04/03/2003	PROFILE	190	190	41.25	41.25
G266DEA	MW-266	04/03/2003	PROFILE	200	200	51.25	51.25
G266DFA	MW-266	04/04/2003	PROFILE	210	210	61.25	61.25
G266DGA	MW-266	04/04/2003	PROFILE	220	220	71.28	71.28
G266DHA	MW-266	04/04/2003	PROFILE	230	230	81.25	81.25
G266DIA	MW-266	04/04/2003	PROFILE	240	240	91.25	91.25
G266DJA	MW-266	04/04/2003	PROFILE	250	250	101.25	101.25
G266DJD	MW-266	04/04/2003	PROFILE	250	250	101.25	101.25
HC61GPRKA-A	61GPRKA	04/02/2003	SOIL GRAB				
HCDEMO2SPPE	DEMO2SP	04/01/2003	SOIL GRAB				
HCDEMO2T1PE	DEMO2T1	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T1PE	DEMO2T1	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T1PE	DEMO2T1	04/01/2003	SOIL GRAB	0	0.25		

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OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HCDEMO2T1PE	DEMO2T1	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T2PE	DEMO2T2	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T2PE	DEMO2T2	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T2PE	DEMO2T2	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T3PE	DEMO2T3	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T3PE	DEMO2T3	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T3PE	DEMO2T3	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T4PE	DEMO2T4	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T4PE	DEMO2T4	04/01/2003	SOIL GRAB	0	0.25		
HCDEMO2T4PE	DEMO2T4	04/01/2003	SOIL GRAB	0	0.25		

**Profiling methods include: Volatiles and Explosives** Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry Other Sample Types methods are variable SBD = Sample Begin Depth, measured in feet bgs

SED = Sample End Depth, measured in feet bgs

BWTS = Depth below water table, start depth, measured in feet BWTE = Depth below water table, end depth, measured in feet

# TABLE 3 DETECTED COMPOUNDS-UNVALIDATED SAMPLES COLLECTED 03/07/03 - 04/05/03

OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W02-13M2A	02-13	04/01/2003	GROUNDWATER	83	93	44.2	54.2	E314.0	PERCHLORATE	
PT80M1INF1A	MW-80	03/31/2003	PILOT STUDY	130	140	86	96	E314.0	PERCHLORATE	
PT80M1INF5A	MW-80	04/02/2003	PILOT STUDY					E314.0	PERCHLORATE	
PT80M1INF5D	MW-80	04/02/2003	PILOT STUDY					E314.0	PERCHLORATE	

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.

SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BELOW GROUND SURFACE

SED = SAMPLE COLLECTION END DEPTH IN FEET BELOW GROUND SURFACE

BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET

BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET

PDA/YES = Photo Diode Array, Detect Confirmed

PDA/NO = Photo Diode Array, Detect Not Confirmed

\* = Interference in sample

+ = PDAs are not good matches